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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,826	12/07/2001	Tomohiko Ito	Q66566	7762

7590

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EXAMINER

THOMPSON, JAMES A

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/004,826

Applicant(s)

ITO, TOMOHIKO

Examiner

James A. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 6/1-6/4 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsubara (US Patent 5,712,666).

Regarding claim 1: Matsubara discloses an image recording apparatus (figure 44 and column 11, lines 53-55 of Matsubara) comprising an image drafting means (figure 7(34) of Matsubara) that drafts a line form image on a portion of a recording medium (column 12, lines 60-67 of Matsubara); a conveyance means ("driving means") that conveys said recording medium in a direction (Y direction) substantially perpendicular to the lengthwise direction (X direction) of said drafted line form image (column 12, lines 60-67 of Matsubara), wherein said image is recorded two-dimensionally on said recording medium by said conveyance means conveying said recording medium in said conveyance direction as said image drafting means drafts said line form image (figure 10 and column 12, lines 65-67 of Matsubara); and a detection means (figure 15(112-119,125) of

Matsubara) fixedly positioned in relation to said conveyed recording medium (column 16, lines 12-17 of Matsubara).

Regarding claim 2: Matsubara discloses that said image drafting means as well as said conveyance means are provided within a housing (figure 44 and column 28, lines 41-43 of Matsubara), and an opening is provided in said housing in the vicinity of the aforementioned conveyance means, extending in said conveyance direction (figure 44(1009) of Matsubara). Figure 44 of Matsubara shows a typical opening for a printer (figure 4(1009) of Matsubara) where the printed paper is ejected, and is thus in the vicinity of the aforementioned conveyance means, extending in said conveyance direction.

Regarding claims 3 and 4: Matsubara discloses that said image drafting means is a thermal head (figure 17a(232) and column 17, line 65 to column 18, line 3 of Matsubara).

Regarding claims 6/1-6/4: Matsubara discloses recording a density pattern for shading correction on a recording medium (figure 10 and column 13, lines 34-42 of Matsubara); obtaining said recording medium on which said density pattern for shading correction has been recorded (column 13, line 65 to column 14, line 2 and column 14, lines 10-12 of Matsubara); conveying said recording medium having said density pattern recorded thereon in a direction that substantially matches the lengthwise direction of said density pattern (Y direction) (column 12, lines 60-67 of Matsubara); detecting said density pattern by a detection means (column 14, lines 10-14 of Matsubara); and obtaining shading correction data based on the detection result of said detection means (figure 9(S53) and column 14, lines 23-25 of Matsubara).

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5/1-5/4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara (US Patent 5,712,666) in view of Nakai (US Patent 5,539,523).

Regarding claims 5/1-5/4: Matsubara does not disclose expressly that said conveyance means is capable of varying the conveyance speed of said recording medium.

Nakai discloses varying the scanning speed (column 11, lines 12-17 and column 5, lines 50-54 of Nakai), and thus varying the conveyance speed of the recording medium taught by Matsubara. Pre-scanning is used simply to determine areas of specific color (column 5, lines 50-54 of Nakai) and is not the full scanning operation that is required to properly read the image data (column 11, lines 12-17 of Nakai). Thus, the pre-scanning is performed faster than the regular scanning. Therefore, the conveyance speed of the recording medium is varied.

Matsubara and Nakai are combinable because they are from the same field of endeavor, namely shading and color correction of scanned and printed digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to vary the conveyance speed for different

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types of scanning, as taught by Nakai. The motivation for doing so would have been to be able to determine specific areas that need correction more quickly than with conventional scanning (column 6, lines 40-45 of Nakai). Therefore, it would have been obvious to combine Nakai with Matsubara to obtain the invention as specified in claims 5/1-5/4.

Regarding claim 7: Matsubara discloses recording a density pattern for shading correction on a recording medium (figure 10 and column 13, lines 34-42 of Matsubara); obtaining said recording medium on which said density pattern for shading correction has been recorded (column 13, line 65 to column 14, line 2 and column 14, lines 10-12 of Matsubara); conveying said recording medium having said density pattern recorded thereon in a direction that substantially matches the lengthwise direction of said density pattern (Y direction) (column 12, lines 60-67 of Matsubara); detecting said density pattern by a detection means (column 14, lines 10-14 of Matsubara); and obtaining shading correction data based on the detection result of said detection means (figure 9(S53) and column 14, lines 23-25 of Matsubara).

Matsubara does not disclose expressly that said step of conveying is performed at a speed slower than the speed at which said density pattern was recorded.

Nakai discloses performing high-speed printing (column 5, lines 60-62 and column 6, lines 17-26 of Nakai), but conventional scanning (column 11, lines 12-17 of Nakai). Thus, when the image data is scanned, the conveying is performed at a speed slower than the speed at which the image data (which corresponds to the density pattern taught by Matsubara) was recorded.

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Matsubara and Nakai are combinable because they are from the same field of endeavor, namely shading and color correction of scanned and printed digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform scanning of the density pattern at a slower speed than the printing of the density pattern, as taught by Nakai. The motivation for doing so would have been to obtain better quality reproduction of colors (column 5, lines 60-61 of Nakai). Therefore, it would have been obvious to combine Nakai with Matsubara to obtain the invention as specified in claim 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson
Examiner
Art Unit 2624


14 November 2005

THOMAS D. MOORE
11/17/2005